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2020 Year End Summary, Update, Preview



Santa Clara County ARES®/RACES
Revised: 8-Dec-2020

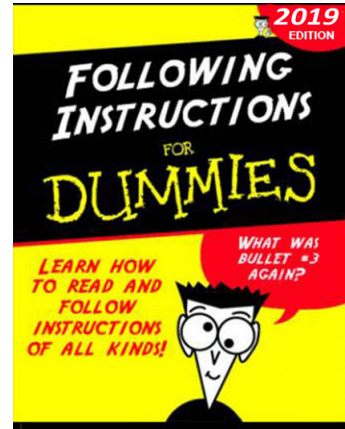
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HOUSEKEEPING

- Introductions
- Pen/pencil & paper
- Distractions
 - Cell phone
 - Pets
 - Other household members
- Questions – “Raise Hand”
- Breaks
- If we lose Internet connection
- Course Credit



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Agenda

- Year in Review
- Packet Update – Outpost and PackItForms
- Simulated Public Service Event - SET
- Intermod Calculator
- Training Update
- Cupertino - Infectious Disease Response Plan
- Forms Review
- Credentialing Program and COVID



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Year in Review

Tim Howard, KE6TIM

Revised 7-Dec-2020

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2020 Objectives and Goals

- Aggressive Training and Exercise Plan
- Earn C4 Credential by Year End
- Adding WiFi connection to BBS Backbone for cities and agencies.
- March 11 - we cancelled or postponed all events thru mid April
- March 17 – SCCo Shelter In Place order

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What we did to address COVID

Cancelled or Postponed

- Mar – Net Control IIB Class
- Mar – Fundamentals Class
- Mar – Pop-Up NC Practice
- Mar – Medical Health Exer.
- Apr – NC Type II Class
- May – Message Passing Class
- Jun – Event Planning Class
- Aug – RDF Mini Drill
- Nov – Message Passing Class

Added

- Apr – Repeater Sprint Contest
- June – Field Packet Mini Drill
- Oct – Sim. Public Service Event

Modified & Rescheduled

- May – Pop-Up Message Passing
- June – Pop-Up Packet Practice
- July – Field Ops Type IIA Class
- July – Field Ops Type IIB Class

Modified some classes for Presentation via Zoom

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Classes Not Conducive to Remote Teaching

- Message Passing Class
 - Numerous one-on-one participant interaction sending and receiving messages between two participants
 - Student interaction with instructor and other participants that does not lend itself to remote instruction

What can you do?

Read the [Message Handling Procedures](#) document is a good place to start. Reviewing the examples shown will make you a better message passer.

www.scc-ares-races.org/training/courses/Msg_Passing/Message_Handling_Procedures_v191115.pdf

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Classes Not Conducive to Remote Teaching

- Event Planning Table-Top
 - Close interaction between team members during the class.
 - Participants are seated at a table and plan a simulated event. They discuss requirements and plans for equipment, staff, addressing each aspect of an event: NC, Packet, Field Ops, Shadows, Logistics, Safety, Staging, etc.

What can you do?

Review the class Event Planning handouts

If you want to gain experience volunteer to help plan an event at the city level, or assist an experienced planner on one of the county events.

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Packet Update

Jim Oberhofer, KN6PE

Revised 7-Dec-2020

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Packet Exercise

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Weekly Packet “Practice”

2020... by the numbers (through 8-Dec-2020)

	Monday	Tuesday	'20 ttl	'19 ttl	'18 ttl
Total Practice Messages sent	1394	1744	3138	2844	2116
% Correct all the time	96.6%	94.7%	95.5%	93.7%	93.2%
Ave # of Participants / Night	27	34	31	29	25.5

+6% +12%

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Weekly Packet “Practice”

- See the “*Standard Packet Check-In/Out Message*” App Note under...
<https://www.scc-ares-races.org/data/packet/index.html#app-notes>
- See the *Practice Message, Subject* section under...
<https://www.scc-ares-races.org/data/packet/weekly-packet-practice.html#Message>

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What was new, different in 2020?

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440 access channels added BBS Call Signs and Frequencies

Call Sign	AX.25	User Access	BBS-BBS	Location
W1XSC	W1XSC-1	145.750, 223.620, 433.570		Santa Clara Co Office Bldg (San Jose)
W2XSC	W2XSC-1	145.730, 223.560, 433.590		Crystal Peak (South County)
W3XSC	W3XSC-1	144.310, 223.540, 433.450		Palo Alto
W4XSC	W4XSC-1	145.690, 223.600*, 433.550	223.600	Frazier Peak (above Milpitas)
W5XSC	W5XSC-1	varies	varies	Training, events, backup
W6XSC	W6XSC-1	varies	varies	Testing, backup

- Recommendation
 - Individuals use 2m or 440 access (more readily available equipment)
 - EOCs use 220 access (less congested)
 - Download and print this listing for your Go Kit
 - Check web site and bulletins for changes

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Mutual Aid Request Form SCC RACES

- The Mutual Aid Request form is used to request radio RACES operators during an activation.
- This form is now part of the public packet installer 150M.
- Do not use for...
 - RACES Public Service Events
 - Non-RACES jurisdiction mutual aid requests

The screenshot shows a detailed form for requesting mutual aid. Key sections include:

- Message Numbers:** Origin: 495-1928P, Destination: [redacted]
- Date:** 12/07/2020
- Handling:** Immediate (ASAP), Priority (+1 hr), Routine (+2 hrs)
- ICS Position:** [redacted]
- Location:** [redacted]
- Agency:** [redacted]
- Assignment:** Duties, conditions, equipment, shift times
- Amateur Radio Resources Requested:** Table with columns for Qty, Role/Position, Preferred Type, Minimum Type
- Requested Arrival:** Date(s) and Time(s) fields
- Reporting Location:** Street Address, parking, entry Instructions
- Contact on Arrival:** Name/Position and contact info
- Travel Info:** Routes, hazards, lodging
- Requested By:** Name, Title, Contact (e-mail, phone, frequency)
- Approved By:** Name, Title, Contact, Signature, Date (12/07/2020), Time (hh:mm)
- Radio Operator Only:** Relay, Rcvd, Sent, Name, Call Sign, Date, Time

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Zoom!

Packet training in pajamas

- Ran all the packet classes by zoom
- Zoom registration helped track who actually showed up (and stayed for the entire class!)
- Completing the homework was prerequisite for class credit
- Office Hours offered a chance for troubleshooting, a 1-on-1 chat, and general Q&A
- Quizzes... checked if you were still with us

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1. If anything is possible, is it possible for anything to be impossible?

Yes

No

Maybe

Wha?

Launch Polling

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Quizzes help check how we are doing

User Name	Question	Answer
	Q2. Packet Radio is good for passing:	All of the above
	Q3. One city where a SCCo RACES BBS is located is:	Palo Alto
	Q5. The TNC that is used by the County and many operators	KPC3+
	Q6. We use a tactical calls in packet radio because:	it keeps the station packet address the same
	Q7. A received message displayed as red on the In Tray indicates:	The message is Urgent.
	Q8. What are PackItForms?	Forms-based messaging that supports sending and receiving messages
	Q2. Packet Radio is good for passing:	All of the above
	Q3. One city where a SCCo RACES BBS is located is:	Palo Alto
	Q5. The TNC that is used by the County and many operators	KPC3+
	Q6. We use a tactical calls in packet radio because:	it keeps the station packet address the same
	Q7. A received message displayed as red on the In Tray indicates:	The message has not yet been read.
	Q8. What are PackItForms?	Forms-based messaging that supports sending and receiving messages
	Q2. Packet Radio is good for passing:	All of the above
	Q3. One city where a SCCo RACES BBS is located is:	Palo Alto
	Q5. The TNC that is used by the County and many operators	KPC3+
	Q6. We use a tactical calls in packet radio because:	it keeps the station packet address the same
	Q7. A received message displayed as red on the In Tray indicates:	The message is Urgent.
	Q8. What are PackItForms?	Forms-based messaging that supports sending and receiving messages
	Q3. One city where a SCCo RACES BBS is located is:	Palo Alto
	Q5. The TNC that is used by the County and many operators	KPC3+


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Outpost & PackItForms

Review

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What's in the box?




- **SCCo Integrated Packet Installer 150M**
 - **Outpost Packet Message Manager**
 - GUI-based interface for managing packet communications
 - Makes using packet as simple as using e-mail
 - **PackItForms**
 - Next generation HTML-based forms for use with Outpost
 - Headless Chrome for auto-printing support
 - **PacFORMS**
 - HTML-based forms for use with Outpost
 - Since 2007, simplified forms-based data entry, reduced network bandwidth

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SCCo Installer v150M

December 2020



PackItForm 3.2*

- PackItForms AutoPrinting
- Move the XSC RACES Mutual Aid Request from the private to the public edition
- browse.cmd enhancements and updates
- Various form updates

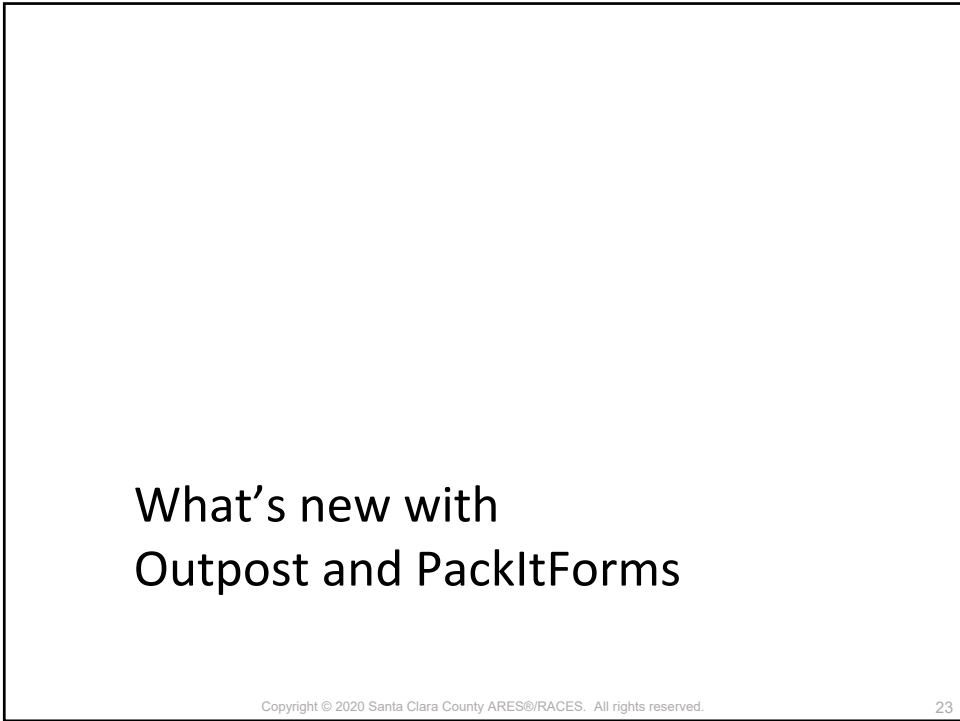
Outpost v3.4 c015*

<p>By the numbers</p> <ul style="list-style-type: none"> • 1 New Feature • 15 Defects • 33 Enhancements • 19 SCCo Submitted • 49 Total changes 	<p>These were related to</p> <ul style="list-style-type: none"> 12 - Message Handling 9 – PackItForms AutoPrinting 5 – Other Addon Enhancements 4 – Opscripts ... plus another 19 various changes
--	---

*See the release notes for details

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4. Message changes

Popup Menus

- Pops up a specific menu of common commands or controls.
- Highlight a message and right-click to open the popup menu
- Added to
 - Outpost message listing
 - When creating a new message
 - After receiving a message

NOTE! Missing your favorite command? Let me know.

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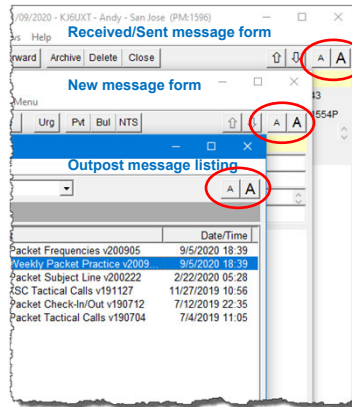
24

3. Message changes

Enhancing Readability

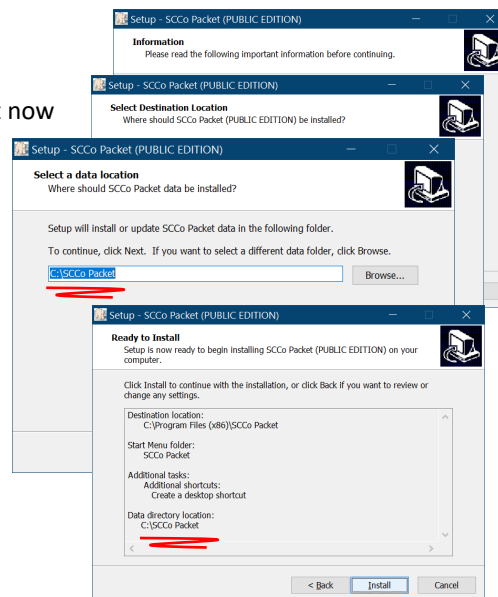
- Ever notice the **A A** in the upper right portion of the forms?
- These controls decrease or increase the font size of the text areas.
- Changes are preserved and will be applied the next time you run Outpost.

HINT: If you have a lot of **Unread Messages** (those shown in BOLD), you must restart Outpost for the font resize to take affect.



2. New installation?

- On a NEW clean install, Outpost now defaults the data directory to C:\SCCo Packet
- If Outpost is not pointing to this data directory now AND your installation works fine, then there is no need to change it.



1. AutoPrinting for PackItForms

- AutoPrinting of PackItForms has been an objective since the PackItForms initiative was kicked off.
- The main requirements were:
 - Message printing should occur automatically for both outgoing and incoming messages. This will build on the capability that exists for plain text messages.
 - The user can control turning AutoPrinting on and off.
 - All auto-printing occurs without user intervention.
- The Outpost v3.4 with PackItForms 3.2 releases make AutoPrinting a reality.

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1. AutoPrinting for PackItForms

Features

1. Automatically print messages when they are received, or sent
2. Includes plain text and PackItForm messages
3. Selectable number of copies for received and sent messages
4. Add footers to PackItForms

When should you use this

1. Need to distribute messages to different teams in the EOC or ICP
2. Keep track of who gets which copy

Who is using this now

1. SCC RACES at the County EOC

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Step by step process

AutoPrinting

1. Install the latest version of SCC Installer 150M
2. Run Outpost
3. Set up Send/Receive Settings
4. Set up General Print Settings
5. Do it!

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Plan for printing copies

1. Before you do anything, make sure you know who needs to get copies of SCCo PackItForms. For instance, suppose you plan on distributing message copies to the following:
 - Radio Room
 - Planning & Intel
 - Operations
- Next...

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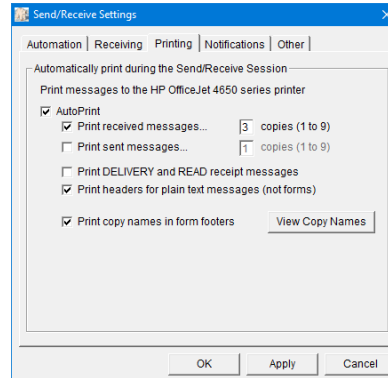
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Set up Outpost for AutoPrinting

2. From Outpost,

- **Tools > Send/Receive Settings, Printing Tab**
- Check AutoPrint
 - ✓ Check **Print received messages** and enter the number of copies; 3 for this example.
 - ✓ Check **Print sent messages** if you want outgoing messages printed.
 - ✓ Check **Print copy names...** if you want footers printed.
If you intend to use Copy Names, press the **[View Copy Name]** button to set the Copy Names.



NOTE! Copy Names refers to the footer text that is placed on the bottom of the PackItForm.

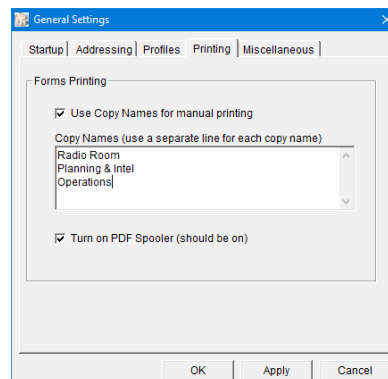
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Set up Outpost for AutoPrinting

3. From the **[View Copy Name]** button (or **Tools > General Settings**),

- Enter the Copy Names as you want them to appear on the PackItForm footer; one per line.
- The order in which you enter them is the order they will be printed.
 - ✓ If you want to use Copy Names for manual printing, make sure that box is checked.

NOTE! The PDF Spooler should always be on.



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Watching it happen

- With this setup, you just received a PackItForm ICS213 message. Within 30 seconds, you see 3 copies printed out.

MESSAGE FORM
SCCo ICS Form 213 (05/28/2019) PIF 2.1

Sender's Msg #²: CUP-1562P
My Msg #³: 6PE-1563P
Receiver's Msg #³

Date: 1: 12/05/2020
Time: (24 hr clock) 21:22

Situation Severity⁴:
 Emergency (e.g. life threat)
 Urgent (e.g. property threat)
 Other (all others)

Message Handling Order⁵:
 Immediate (as soon as possible)
 Priority (less than one hour)
 Routine (more than one hour)

Message Requests You To:⁶
 Take action:
 Yes No
 Reply:
 Yes, by No
 For your info (no action required)

ICS Position:⁷ DEC
 Location:^{8a} SCC EOC
 Name:

ICS Position:⁸ EC
 Location:^{8b} Cupertino EOC
 Name:

Telephone #:

How Received⁹ or Sent:
 Telephone
 EOC Radio
 Amateur Radio
 Dispatch Center
 FAX
 Other: Packet
 Courier

Operator Call Sign: ZK6PE
 Operator Name: Jim Oberhofer
 Date: 12/05/2020 Time: 21:25

CUP-1562P Radio Room Page 1 of 1

CUP-1562P Planning & Intel Page 1 of 1

CUP-1562P Operations Page 1 of 1

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Controlling what gets printed

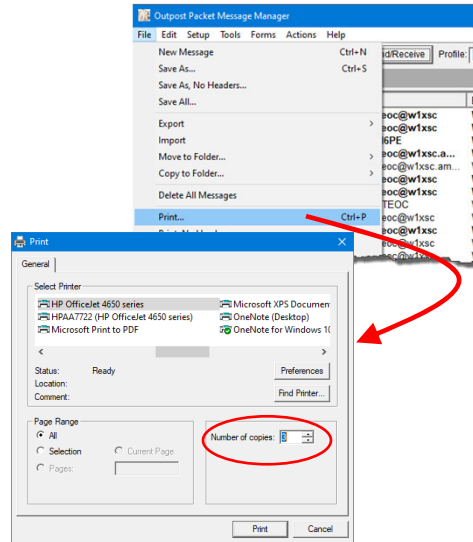
- On the **Tools > Send/Receive Settings, Printing Tab**, you have number of copies to be printed.
- On the **Tools > General Settings, Printing Tab**, you set the copy names (3 in our example).
- Which takes precedence?

If # copies is set to...	AND Copy Names is...	Then what is printed...
1	Radio Room Planning & Intel Operations	Radio Room
3	Radio Room Planning & Intel Operations	Radio Room Planning & Intel Operations
4	Radio Room Planning & Intel Operations	Radio Room Planning & Intel Operations <blank footer>

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What about manual printing?

- Same rules apply.
 - To print more than one copy,
 - File > Print...
 - Select your Printer
 - Change Number of copies
 - Print!
 - To try multi-copy printing without actual paper-printing, select, try...
 - CutePDF Writer
 - Microsoft XPS Document
 - OneNote
 - Snagit 12 print driver
- NOTE:** Not all print drivers support multiple copy printing



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What's new for 2021?

- Maintenance release planned
 - Adds suggested changes to PackItForms
 - Fixes reported bugs; more enhancements to Outpost
- Pop-up Packet Exercise
 - Date... tbd
- Packet class schedule
 - Packet Type IIIA 7-Aug-2021
 - Packet Type IIIB 2-Oct-2021
 - Packet Type II 6-Nov-2021

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For More Information

- Support
 - See the Santa Clara County ARES/RACES web site packet page
 - <https://www.scc-ares-races.org/data/packet/index.html>
 - Join the packet discussion group
- Practice
 - Send a message during the weekly packet net, either or both days
 - <https://www.scc-ares-races.org/data/packet/weekly-packet-practice.html>
 - Automated feedback to help you improve, verify you've got it right
 - Participate as a packet operator at drills and other events

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Simulated Public Service Event and ARRL SET

Andreas Ott, K6OTT

Revised 3-Dec-2019

Photo credits: Leslie Grimm KK6EKN, Loretta Keller WB6BWQ, Mark Laubach K6FJC

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2020: the “uneventful” year

- Zero public service events this year, even the one quarterly drill outdoor activity needed to be called off due to heavy smoke (extremely bad air quality in August)
- Almost no other qualifying events for credentials
- New Concept: the parade is simulated and everything was made up. Follow scripted playbook activities for actors, to “provoke” radio traffic that closely resembles the one from the real world parade.
- Exercise built for two hours, run it twice: once you are an operator, once you are a simulator
- Designed as deployment exercise with very little training component (not strictly meant for newbies)
- Entirely outdoor, physically distant operators, no “touch” community items (sharing radios)
- Adhere to state and county COVID-19 guidelines, stay home if you have symptoms, wash your hands, don’t touch your face

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Nobody saw that coming...

- We moved into uncharted territory by putting on an event that is 100% simulated. The Pros @SCC_OES hire a specialized and \$\$\$ consulting firm to put on exercises like “Yellow Command”.
- Prior Art: “Drill in a binder” in Los Altos
- Your Planning Team: 8 core members, plus input from Jim Clark, N6JRC and the real parade Nancy
- 4 weeks planning, 7 meetings, estimated 350 hrs
- Developed framework and placed events on the timeline, put tasks, injects and instructions into playbooks. Procedure to automatically generate printed sheets for each simulator from the MSEL (master scenario events list) spreadsheet. Create roleplay instructions for Principals. Write briefings for all positions. Go!

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MSEL based planning

P1.04
 Simulator: MunsterCar-Sim8
 Time: 10-04-00
 Title: car circumventing barricade at Whitney St and 1st St; driving in
 Responder: Police
 Precedence: routine
 Props needed: cardboard car2
 Details what you need to do: usecar prop driving in from float viewing area, go all the way east on 1st St, turn right onto State St, right on 2nd St, west on 2nd St, left on Main, hang out there (in parade route)
 What is expected to happen: checkpoint to report type of car, license plate, direction of travel
 End of task: drive back out after 2 minutes, back the way you came
 Unfortunately, nobody can be told what *The Matrix* is.

- Parade documents + map
- Handling “situations”, Lost Parent & Found Child
- Briefings
- 4 netcontrols on 3 nets, rotate every 25 mins
- Parade Principals and Shadows
- One MSEL per net
- One Inject task per sheet for simulators: at <time> do <this> until <that>
- Float drivers, pedestrians

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Statistics - day of the event

- Reduced number of SET categories scored, only one agency, one community served, no formal traffic
- 44 Amateur Radio Operators participated, approximately 300 volunteer hours delivered
- Of these were 15 “new” hams, licensed since 2016
- 100% of stations on emergency power!
- Current ARRL SET score 266, THANK YOU!
- It’s just slightly more than a quarter of the points compared to last year, but better than nothing. We don’t know yet how the big hitters will score.

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After Action talking points

- We did OK on prescribing the Simulation, but it depends on the actors pulling their weight acting them out through roleplay
- Some simulation took on a life of its own
- Some simulation events need more QA, especially if they are multi-step or multi-operator
- We exercised some real world scenarios (open mike, traffic during netcontrol shift change)
- Forms handling has improved!
- During an activation: you **MUST NOT** leave home without being checked in on the Resource Net

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Photos: Parade Route



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Photos: Operators in position



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Photos: Simulator Briefing



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Photos: Parade Floats at Third Street



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Photos: Netcontrol



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Photos: Police Liaison near Safeway



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Photos: Hotwash debrief



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Photos: award winning masks Jeff & Kelly



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Intermod Calculator

Andreas Ott, K6OTT

Revised 3-Dec-2019

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Intermod Calculator Spreadsheet

- From 2020 Antenna Fundamentals Class
- We only had one event for which we needed to calculate any potential intermodulation distortion, and that event also used more than 3 frequencies. So, this tool was of limited use.
- Still looking for feedback
- Is a spreadsheet the correct tool, or would you rather use a Python3 script (which could be made to handle more than three frequencies)?
- Calculation for two transmit frequencies is performed for you, results are checked against three receive frequencies
- For two transmitters, the four most interesting 3rd order products are displayed and cells use conditional formatting to display red background if too close to the third frequency
 - $(2f_1 - f_2)$, $(2f_2 - f_1)$, $(2f_1 + f_2)$, $(2f_2 + f_1)$
 - The first two are of most interest because they are near the two transmitters (or may land close to other nearby receivers)
 - The last two are typically out of band (beware of VHF/UHF)
 - Won't affect our other receivers
 - Could affect other radio services at a shared transmitter site if not filtered, but not so important for an isolated ham radio event
- Bonus: Spreadsheet also calculates 3rd harmonics (2m and 70cm bands)

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The screenshot shows the 'IntermodCalculator_v2beta' spreadsheet. The input frequencies are: f1 output: 145.170, f1 input: 144.570, f2 output: 147.500, f2 input: 147.500, f3 output: 442.500, f3 input: 447.500. The spreadsheet lists various intermodulation products with their categories and absolute values. Conditional formatting is used to highlight products that are 'red=closer than 0.015 MHz' and 'green=further than 0.025 MHz'. The '3rd harmonics' section shows products like 3f1out (435.51) and 3f2out (297.33) which are highlighted in red.

Products category	3rd order	Intermod	ABS(intermod)	
interesting	f1out+f2out-f3out	-149.830	149.830	4.660
interesting	-f1out+f2out+f3out	444.830	444.830	299.660
interesting	f1out-f2out+f3out	440.170	440.170	295.000
very interesting	2f1out-f2out	142.840	142.840	-2.330
very interesting	2f1out+f3out	-152.160	152.160	6.990
very interesting	2f2out-f1out	149.830	149.830	4.660
very interesting	2f2out+f3out	-147.500	147.500	2.330
interesting	2f3out-f1out	739.830	739.830	594.660
interesting	2f3out+f2out	737.500	737.500	592.330
3rd harmonics	3f1out	435.51	435.510	290.340
3rd harmonics	3f2out	442.5	442.500	297.330
3rd harmonics	3f3out	1327.5	1327.500	1182.330
outliers	2f1out+f2out	437.840	437.840	292.670
outliers	2f1out+f3out	732.840	732.840	587.670
outliers	2f2out+f1out	440.170	440.170	295.000
outliers	2f2out+f3out	737.500	737.500	592.330
outliers	2f3out+f1out	1030.170	1030.170	885.000
outliers	2f3out+f2out	737.500	737.500	592.330

Version History:
 v1beta 2020-09-19 for antenna fundamentals and crossband repeating class
 v2beta 2020-09-27 clarify using output frequencies for intermod calculation, compare to inputs and outputs in columns E through J

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Training Plans for 2021

Judy Halchin, KK6EWQ

Revised 5-Dec-2019

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Scheduled classes for 2021

- Introduction to Emergency Communications (Zoom)
- Fundamentals of Emergency Communications (Zoom)
- Field Operations IIIA, IIIB/II (Outdoor)
- Net Control IIIA, IIIB, II (Zoom)
- Shadowing (Zoom)
- Packet Operations IIIA, IIIB, II (Zoom)
- Cross-Band Repeating / Antenna Fundamentals (Zoom)

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Zoom classes

- No need to travel
- Presentations work well
- Practice sessions work better for some people
- Many fewer questions asked during Zoom classes
- Very little interaction among the participants in Zoom

When it's allowed and safe, we will go back to in-person classes, but we'll try to keep some of the benefits of Zoom classes.

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Cupertino Infectious Disease Response Plan

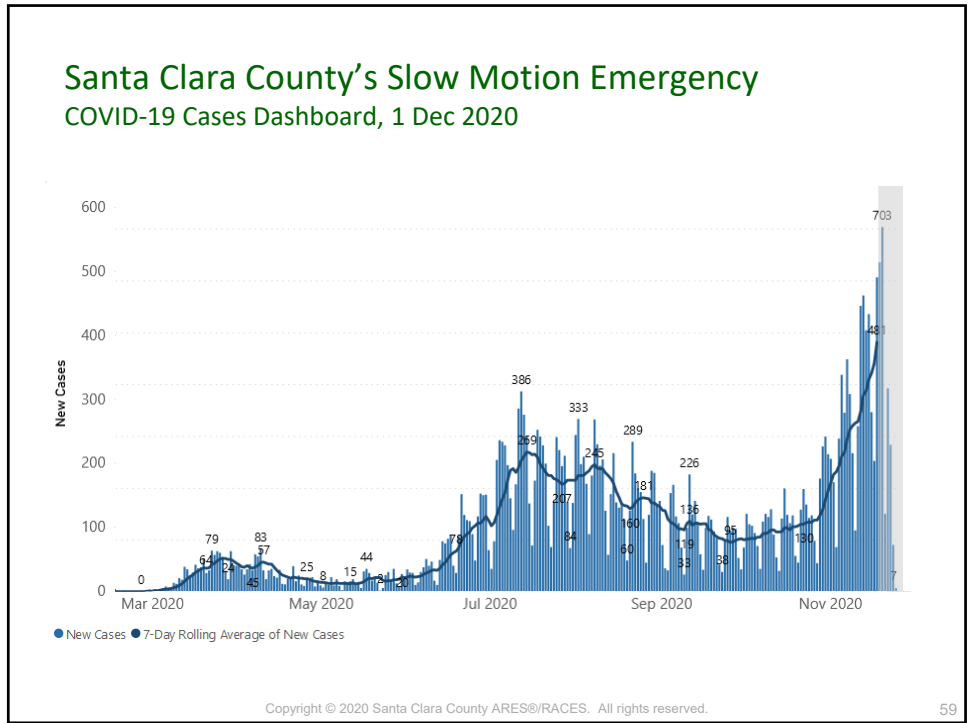
Jim Oberhofer, KN6PE

Revised 1-Dec-2019

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Situation

What does this mean to us?

- The COVID-19 pandemic is occurring, and will be with us for a while.
- The loss of life and associated economic and social trauma has been significant.
- Given the speed of its onset and expected duration, it is prudent to have a plan in place that guides our emergency field response.
- The complication of dealing with compound emergencies must be factored into any response plans to ensure we not only can meet the assigned mission, but also maintain the health and safety of everyone involved.
- Consider:
 - earthquake ...
 - wildland fire threat... } ... during a pandemic
 - 200 year flood ...
- The pandemic element of the response is what we addressed.

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Where to find it

Infectious Disease Response Plan

<https://www.cupertinoares.org>

Cupertino ARES/RACES
Providing emergency and public service communications for the City of Cupertino, California

Docs & References
Introduction | SOP | Field References | Net Control Scripts | Mesh Networking
Updated: 10 August 2020

Introduction
Ensuring a repeatable process is critical to ensure a successful activation of field deployment. Skills are maintained by practice and drills, and ensuring that the response process is understood, consistent, and repeatable. This section describes the various documents that support this objective.

Standard Operating Procedures

Name	Description, Content
Infectious Disease Response Plan (.docx), Sep 2020	This document is supplemental guidance for Cupertino Citizen Corps whenever CCC is activated for a non-critical response during an infectious disease or pandemic event. Revisions will be made as new guidance becomes available.

Infectious Disease Response Plan
Cupertino Citizen Corps

2 September 2020, version 1.0

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What's in it

IDR Plan

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OES Goal... only one

Cupertino OES gave us only one goal for our *Infectious Disease Response Plan*, that is, no matter what we do:

- *Protect the health and safety of the public and Cupertino Citizen Corps responders*

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Plan Objectives

1. Protect CCC responders and the community with whom we interact

- a. Protect their health and safety.
- b. Maximize resources to maintain day-to-day emergency operations.
- c. Minimize the virus spread and reduce the impact on CCC and public health.

2. Maintain the continuity of response operations

- a. Continue day-to-day readiness and response operations to the maximum extent possible throughout all stages of the pandemic.

3. Execute the CCC pandemic response

- a. Ensure all CCC teams and facilities can fulfill their response responsibilities during a pandemic.
- b. Communicate and coordinate pandemic preparedness and response to all City staff and other CCC members.
- c. Support the efforts of the City in mitigating the consequences of a pandemic.
- d. Do not become part of the problem.

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Leveraging from similar risks

<https://www.nrc.gov/about-nrc/radiation/protects-you/protection-principles.html>

The screenshot shows the U.S. Nuclear Regulatory Commission (NRC) website. The main heading is "Minimize Your Exposure". Below the heading, there is a paragraph explaining that although exposure to ionizing radiation carries a risk, it is impossible to completely avoid exposure. It then lists three principles: Time, Distance, and Shielding. The "Time" principle states that limiting exposure time reduces the dose. The "Distance" principle states that intensity and dose decrease as distance from the source increases. The "Shielding" principle states that barriers of lead, concrete, or water provide protection from penetrating radiation. The page also includes a navigation menu with categories like "NUCLEAR REACTORS", "NUCLEAR MATERIALS", "RADIOACTIVE WASTE", "NUCLEAR SECURITY", "PUBLIC MEETINGS & INVOLVEMENT", "NRC LIBRARY", and "ABOUT NRC".

Minimize Your Exposure

Although exposure to ionizing radiation carries a risk, it is impossible to completely avoid exposure. Radiation has always been present in the environment and in our bodies. We can, however, avoid **Time, Distance, and Shielding**

Time, distance, and shielding measures minimize your exposure to radiation in much the same way as they would to protect you against overexposure to the sun (as illustrated in the figure below):

- **Time:** For people who are exposed to radiation in addition to natural background radiation, limiting or minimizing the exposure time reduces the dose from the radiation source.
- **Distance:** Just as the heat from a fire is less intense the further away you are, so the intensity and dose of radiation decreases dramatically as you increase your distance from the source.
- **Shielding:** Barriers of lead, concrete, or water provide protection from penetrating radiation such as gamma rays and neutrons. This is why certain radioactive materials are stored under water or in concrete or lead-lined rooms, and why dentists place a lead blanket on patients receiving x-rays of their teeth. Similarly, special plastic shields stop beta particles, and air stops alpha particles. Therefore, inserting the proper shield between you and a radiation source will greatly reduce or eliminate the dose you receive.

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Distance

Minimizing pandemic risk

Limiting close face-to-face contact with others is the best way to reduce the spread of COVID-19... keeping space between yourself and other people outside of your home.

CDC recommends:

- Stay at least 6 feet (about 2 arms' length) from other people.
- Limit close contact with others outside your household in indoor and outdoor spaces.

CCC Action Plan:

1. Adopt and implement social distancing requirements to the fullest extent possible.

SOCIAL DISTANCING

Keep one wavelength apart at 146MHz

146MHz
2.0m ≈ 6.7ft

The diagram shows two black silhouettes of people standing apart. Between them is a red square containing a sine wave representing a wavelength. Below the square, a horizontal line with arrows at both ends is labeled "146MHz" and "2.0m ≈ 6.7ft".

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Time (duration) Minimizing pandemic risk

Most discussions on duration of exposure are aimed at Health Care Professionals (HCP), especially those working in the vicinity of aerosol treatments. The time (or duration) aspect of a contact comes into play when physical distancing requirements cannot be maintained.



Environmental considerations must be factored in when thinking about limiting or minimizing any possible exposure time.

- Spaces with poor air circulation (rooms with little or no ventilation) may result in a build-up of airborne viral matter that increases the likelihood of an infection.
- Conversely, spaces with good air circulation (spaces with open doors and windows, being outside) reduce the viral load by dispersing it over a wider area.

CCC Action Plan:

1. Do not engage in activities similar to those of HCP (be prepared to render First Aid if safe; do so with proper PPE).
2. Maximize the use of outdoor spaces whenever possible to maintain good air circulation.

Shielding / PPE Minimizing pandemic risk

Cloth face coverings are most likely to reduce the spread of COVID-19 when they are widely used by people in public settings.

NOTE: You wearing a mask protects others from you, not you from others.

CDC recommends:

- People wear cloth face coverings in public settings when around people outside of their household, especially when other social distancing measures are difficult to maintain

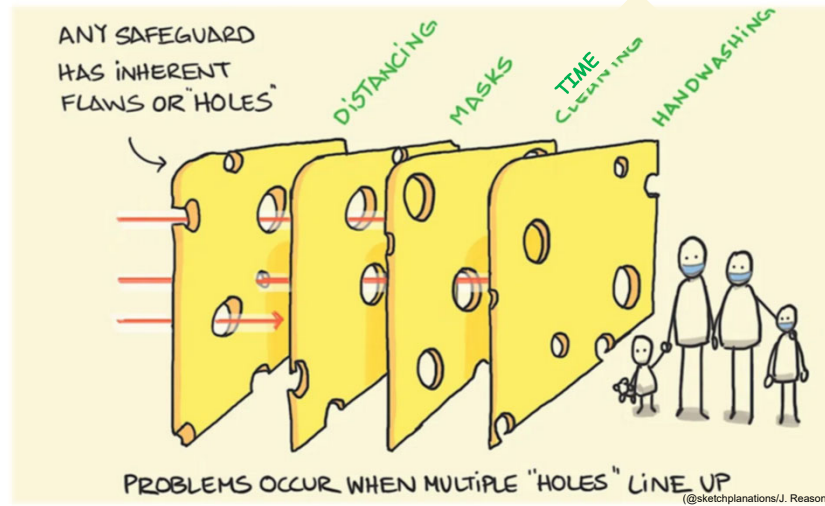


CCC Action Plan:

1. Cloth face covering is required when a CCC responder is near anyone else.

NOTE: Starting June 18 2020, per state order, Californians must wear face coverings in common and public indoor spaces and outdoors when distancing is not possible.

Applying the *Swiss Cheese Model*



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Assessing Risks

Low risk

1. Physical Distancing. Keep at least 6 ft (2 meters) from others in public.
2. Reduced group size in enclosed spaces
3. Outdoor gatherings
4. Sufficient ventilation
5. Face masks

High Risk

1. Close-up, in-person interaction
2. Crowded events
3. Poorly ventilated spaces
4. People talking loudly, singing
5. Prolonged exposure (15 minutes of unprotected exposure with someone less than 6 ft)

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Scope of the Plan

1. General Field Assignments
2. ARK Level 3 Operations
3. ARK Level 2 Operations
4. ARK Level 1 Operations
5. Fire Stations Operations
6. Comm 469 Operations
7. Roles and Responsibilities

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1. General Field Deployment Operations

Highlights – CARES

Deployment activities involve operating a radio in the field to report observations or passing messages by radio on behalf of someone else; applies to Infrastructure Safety Assessment, Ember Watches, and Alt911 operations.

- A Safety Officer will be designated, either dedicated or in conjunction with other duties.
- Exercise social distancing between responders and the public at all times, except as strictly necessary to carry out a task associated with the response mission
- CCC members should recruit other household members as their Buddy
- SS checks resource list for pre-identified members interested in single-person (solo) assignments
- Use two vehicles if two non-household responders travel to the same location
- If you are not comfortable with your surroundings or assignment, let your supervisor know

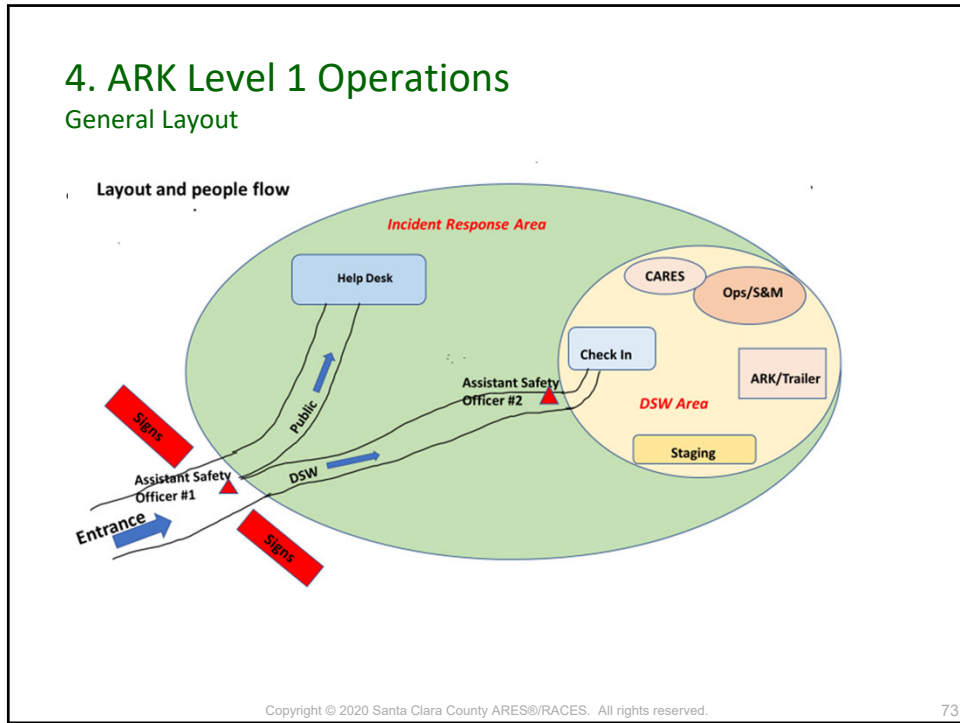
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4. ARK Level 1 Operations

General Layout



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6. Comm 469 Operations

- *Highlights –CARES*
- All *General Field Deployment Operations* changes apply.
- Only one individual will occupy the Comm 469 cab at a time. Supporting staff follows in separate vehicles.
- When deployed, all vehicle operating compartment doors and roof vent will be open for increased air circulation.
- Operations are split between inside and outside.
 - Radio Room Operator (P3) and Shift Supervisor (P4)
 - Resource Net (P1) and SCC County voice net/Packet (P2)

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7. Roles & Responsibilities

Infectious Disease Response Checklists

3.1 Safety Officer, Assistant Safety Officer Checklist

All field deployment locations will have a designated Safety Officer named. This may be a dedicated or shared position depending on the number of people at a specific location.

Checklist – Safety Officer, Pandemic Health Component

This checklist is for two or more responders.

Before the Event

1. Know location
2. Understand role
3. Understand responsibilities

During the Event

4. Monitor situation
5. Communicate
6. Provide support
7. Verify equipment
8. Perform tasks
9. Ensure safety
10. Sign out
11. Prepare for return
12. Provide feedback
13. Perform other duties

After the Event

3.2 Fixed Field Station Checklist

A fixed field station is a radio station set up at either a pre-defined facility or ad-hoc location where communications station infrastructure is put in place (coverage, tables, chairs, power, etc.). This checklist covers Fixed Field Stations.

Checklist

This checklist is relevant for responders at co-located stations.

Before the Event

1. Responders confirm Go-Kit readiness including enhanced PPE items.

During the Event

2. Clean equipment
3. For as responders
4. Station
- a. Maintain physical distance from any person that you encounter.
- b. Cloth face masks are mandatory whenever you are in close proximity of another person.
- c. Perform tasks
- d. Provide support
- e. Communicate
5. Public
- a. On completion of your assignment, submit all infectious disease-related paperwork to the City EOC (include these documents as part of Demob to be submitted to the Planning Section).
- b. Performs a full wipe down of your equipment. Replenish your stock any protection

3.3 Individual/Mobile Station Checklist

An individual/mobile station is where the operator uses an HT (Hand Talkie) or automobile-based mobile radio to pass radio traffic. This checklist covers Individual Field Stations.

Checklist

This checklist is relevant for all CARES responders during an infectious disease event where two or more responders are co-located at a fixed field station to perform a specific event task.

Before the Event

1. Responders confirm Go-Kit readiness including enhanced PPE items.

During the Event

2. Cloth face masks are mandatory whenever you are in close proximity of another person.
3. Maintain physical distance from any person that you encounter.
4. On completion of your assignment, submit all infectious disease-related paperwork to the City EOC (include these documents as part of Demob to be submitted to the Planning Section).
5. Performs a full wipe down of your equipment. Replenish your stock any protection

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Go Kit Additions

- The following additional CCC Responder Go-Kit items are required:
 1. Cloth face mask
 2. Eye protection
 3. Nitrile gloves, at least 2 pair
- The following additional CCC Responder Go-Kit items are recommended:
 1. Hand sanitizer
 2. Sanitizing wipes
 3. Face shield

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Forms Review

Why the paperwork is important

Andreas Ott, K6OTT
Revised 7-Dec-2020

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Broken record: Why logs are important

- The paperwork we get from you is part of us exercising supervision over you while you are deployed. And we need proof of that in case we need to submit a DSW insurance incident report form.
- By keeping good documentation we can show that you did the “right thing™”, also important as a witness statement of events

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From the lonesome event this year

- Forms handling quality has improved compared to last year!
- Training works! So please attend our classes.
- ICS-214 (FieldOps 3A and NetControl 3A Classes) and video training
- ICS-309 (NetControl 3A and FieldOps 3B Classes) and video training
- This year’s event had no ICS-213 form messages (multiple classes / Monthly Practice Sessions)
- But still

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Problems 1: Did these operators attend the same event I did?

- ICS-214: only 9 lines are filled in (vs. 38 lines, or 21 lines on mine), no ICS-309
- OK to be less verbose when it's boring, but just attending an event is 8 lines
- Lost child/parent? crowd counts? H&W
- Time stamps out of order
- ICS-214 last entry at 11:30, operator left event at 14:30 according to ICS-211

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Problems 2: Unit Name and Unit Leader on ICS-214

- Unit Name: Your assigned tactical call or the name of the net you are the netcontrol for, might change
- Unit Leader: Your name and call sign (fill in right away), won't change

UNIT LOG ICS 214-SCCo ARES/RACES	<small>1. Incident Name and Activation Number</small> Mockingbird Heights Mummy Race RIP-18-13T	<small>2. Operational Period (Date/Time)</small> 10/31/18 11/1/18 From: 20:00 To: 04:00
	<small>3. Unit Name / Tactical Call / Designators</small> Tactical Net Control	<small>4. Unit Leader (Name, Call Sign, ICS Position)</small> Herman Munster, W6XRL4

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Problems 3: Netcontrol ICS-309

- This is the main log of all happenings
- FROM and TO columns! See training
- Message column: keywords
- Use English, and we need to be able to decode your abbreviations
- Shift Changes (wax on – wax off, don't forget to breathe)

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Problems 4: Radio Net Name and Radio Operator Name ICS-309

- It should be obvious, but just in case
- And if you forgot your name, check your Drivers License or FCC license

COMM Log ICS 309-SCCo ARES/RACES	1. Incident Name and Activation Number	2. Operational Period (Date/Time)	
	Mockingbird Heights Mummy Race RIP-13-13T	From: 2000	To: 0400
3. Radio Net Name (for NCOs) or Position/Tactical Call		4. Radio Operator (Name, Call Sign)	
Resource Net		Wolf Man, W6WOOF	

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Credential Program

Challenges During COVID

Tim Howard, KE6TIM
Revised 6-Dec-2020

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Events are Required to Gain Experience

- Experience in varied activities is an important part of earning a Credential
- No Public Service Events
- Few Drills/Exercise

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2020

Limited Number of Evaluations

- Pop-Up Packet – P3 and P2 Evals
- Quarterly Drill – N3, P3
- Quarterly Drill – F3 Evals cancelled due to poor air quality (fires)

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2021 Planned Eval Opportunities

- Pop-Up Packet – P3 and P2 Evals
- Quarterly Drills – N3, P3, F3, maybe some Type 2 depending on evaluator availability.
- We will remain open to other opportunities that meet Credential requirements without sacrificing program quality.

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What about 2 year requirement

- The Credential program requires that requirements must be completed within a 2-year period.
- That time frame will be extended.
- When that time frame is determined it will be published.
- But, if an event/activity is offered try and take advantage, don't wait.

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Challenges

- COVID is still with us and probably will affect the number and types of activities for some time.
- We may plan events and later have to cancel them if situations change.
- Bringing the resources (staff, location, scenario, etc.) together takes time and effort.
- Be patient and flexible.

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DSW Stickers

- New stickers for your County DSW card will be sent to the ECs for distribution.
- If ...
 - you are currently a County DSW
 - your contact data in the activity database has been updated or verified within the past 12 months.


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Update/Verify Contact Info

My Contact Information

- My Profile**
- [My Contact Info](#) 
- [My Equipment](#)
- [My Activity Record](#)
- [My Completion Certificates](#)
- [My Credentials](#)
- [My MAC-Qualifying Events](#)
- [Cities/Agencies I Support](#)
- [Change My Call Sign](#)
- [Change My Password](#)

Personal Information

Call Sign*

First Name*

Last Name*

Address 1*

Address 2

City*

State*

Zip*

Emergency Contact Information

Emergency contact*

Contact number*

Thomas Bros. Map Information

Enter the appropriate information for the above address

Page (3 digits) *

Column (A-Z) *

Row (1-9) *

* denotes required field

Contact Information

Home Phone#

Work Phone#

Cell Phone#

Pager

e-mail #1 *

e-mail #2

* denotes required field
at least one number is required

AlertSCC Information

What's this?

County of Santa Clara
(format: for phone & SMS numbers: 999-999-9999)

Phone #1 :

Phone #2 :

Phone #3 :

e-mail #1 :

e-mail #2 :

SMS #1 :

Note: to use AlertSCC, Phone #1 cannot be blank. If it is blank, the other information is ignored.

You last reviewed this information on: 01/07/2011

I have reviewed the information on this page

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Q&A

All Staff

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Thank You!

Please check your email and follow the instructions to complete and return the Course Evaluation.

If you have questions or feedback about this or other training activities, you can join our Training discussion group.

<https://scc-ares-races.groups.io/g/training>

This is a moderated group.

See you at a training class or exercise next year!

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